

FOT-A HIGH PERFORMANCE 1310 NM FORWARD PATH OPTICAL TRANSMITTER



- DOCSIS 3.1 compatible frequency range
- Independent local electronic configuration interface
- Remote management and configuration
- Front or rear optical interface

TECHNICAL SPECIFICATIONS

Optical parameters

Wavelength [nm]	1310±10
Output optical power [mW]	2.5...31 (4...15dBm)
Relative intensity noise (RIN) [dB/Hz]	<-155
Optical connector	SC/APC, EURO2000
Laser type	DFB Cooled

RF parameters

Frequency range [MHz]	47...1218
Return loss [dB]	>16
Flatness [dB]	±0.5
Nominal RF input level (BC / NC) [dBμV]	80 ⁽¹⁾ / 100
RF input level range (BC and NC) [dB]	±8
RF offset range [dB]	-6...+3
RF equaliser range [dB]	0...6
RF testpoint (3.2% OMI) [dBμV]	75±1
Port-to-port isolation (NC to BC) [dB]	>50
CTB [dBc]	-65 ⁽²⁾
CSO [dBc]	-57 ⁽²⁾
CNR [dB]	>51 ⁽²⁾
Noise-to-power ratio (NPR) maximum / Dynamic range of NPR > 42 [dB]	46 / 6 ⁽³⁾

General parameters

Power consumption (typical / maximum) [W]	4.7 / 5.8 ⁽⁴⁾
Operational temperature range [°C]	0...+50
Dimensions [mm]	230x130x35
Weight [kg]	0.5

(1) 92 ITU-T J.83 Annex A 256 QAM channels between 258 MHz and 1002 MHz

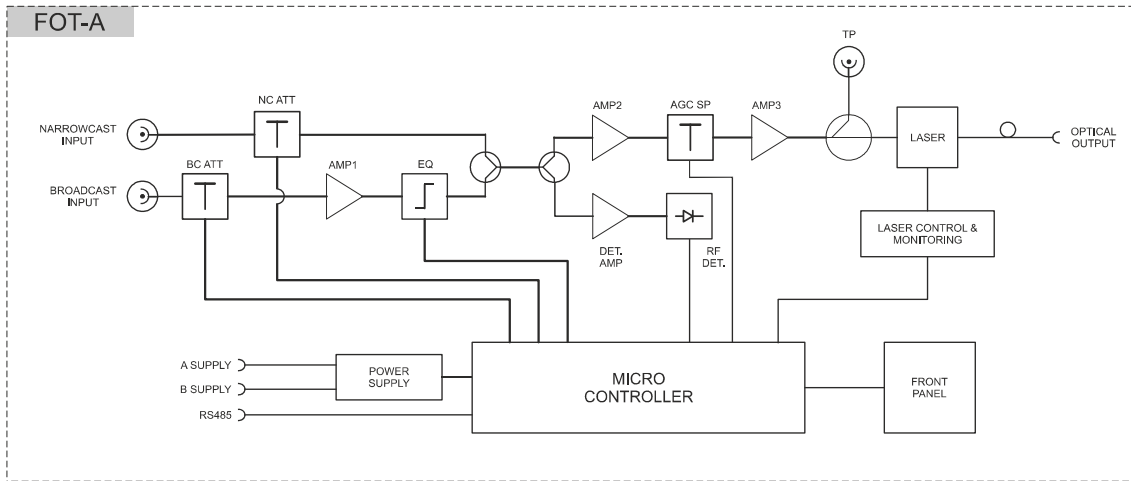
(2) Test conditions: OMI=3.2%, 110 NTSC channels, received power -1 dBm

(3) Measured with flat full spectrum load between 47 and 1218 MHz, after an optical link of 25 km, received power -2 dBm

(4) Typical value measured at a TEC current of 0.3 A, maximum value measured at a TEC current of 1 A

Specifications are subject to change without notice!

BLOCK DIAGRAM



ORDERING INFORMATION

F O T - A 3 X X - X X - X

Output power	
02	2.5mW / 4dBm
04	4mW / 6dBm
06	6mW / 8dBm
08	8mW / 9dBm
10	10mW / 10dBm
13	13mW / 11dBm
16	16mW / 12dBm
20	20mW / 13dBm
25	25mW / 14dBm
31	31mW / 15dBm

Optical interface position	
F	Front side (Recommended type)
R	Rear side

Optical connector	
SA	SC/APC (Recommended type)
EU	EURO2000

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